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ABSTRACT

The paper analyzes issues in bilingual special education and identifies knowledge gaps in the provision of appropriate education to exceptional minority students. The legal bases of bilingual education and special education are reviewed and the intersection of legal issues in bilingual special education is noted. Definitions of the population are explored, as are prevalence figures for minority, handicapped, and minority handicapped students. The need for a coherent data collection plan is emphasized. Assessment and placement considerations are considered, with discussion on the role of culture free tests, adaptive behavior scales, criterion referenced tests, and translated tests. Probelms cited include knowledge about how cultural differences may influence child performance on assessments and unavailability of non-English language instruments. Programing considerations, including student participation, parental involvement, exit criteria, and program options are examined for bilingual education, special education, and bilingual special education. A final section cites future research directions in nondiscriminatory evaluation, multidisciplinary team decisionmaking, development of individualized education programs, and parental participation. (CL)

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BILINGUAL SPECIAL EDUCATION: AN OVERVIEW OF ISSUES

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BILINGUAL SPECIAL EDUCATION: AN OVERVIEW OF ISSUES

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ABSTRACT

This paper indentifies issues relative to bilingual special education by addressing legal bases, definitions of the population, prevalence of handicapping conditions in minority children, assessment and placement practices, and instructional programs and exit criteria. Each area is discussed in terms of bilingual education, special education, and the hybrid field of bilingual special education. Gaps in our knowledge regarding bilingual special education and directions for future research are suggested.

BILINGUAL SPECIAL EDUCATION: AN OVERVIEW OF ISSUES

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Introduction

The educational process, as an object of empirical study, is unique in that it does not easily lend itself to clear delineation of investigation areas. Such is certainly the case when the children to be educated are in any way different from the mainstream population. The overlap in areas becomes more complex as the children under study represent more differences. In bilingual special education, legal bases, assessment practices, placement procedures, instructional methodologies, personnel preparation, and parent involvement all are interrelated and strongly colored by issues of cultural and linguistic differences. To identify gaps in our knowledge it is necessary to examine the literature in these areas relative to bilingual education and to special education and to analyze where and how these two areas intersect in theory, in practice, and in research.

Legal Bases

In recent years, legislation and litigation have provided a framework for provision of special education and bilingual education services in the nation's public schools. Although legal mandates have defined activity in these two areas of educational practice, the intersection of bilingual and special education has been less clear, and concern for such relationship has been the focus of some attention in the educational literature (Baca, 1980b; Figueroa, 1980; Gallegos, Garner, & Rodriguez, 1980). Bilingual special education thus represents a hybrid field with legal bases that emerge from the laws governing its component parts.

Bilingual Education

Title VII of the Elementary and Secondary Education Act (20 USC § 880b), known as the Bilingual Education Act, and the judicial decisions in Lau v. Nichols (1974), and Diana v. State Board of Education (1970

and 1973) form the legal framework in the area of bilingual education. The Bilingual Education Act, based on civil rights notions of non-discrimination, encourages establishment and operation of educational programs using bilingual educational practices, techniques, and methods. The Act is permissive, not mandatory, and offers funding incentives to school districts to develop bilingual programs. Whereas federal bilingual education legislation is permissive, California's bilingual education programs are mandatory under state law (Title 5 Cal. Admin. Code §4300 et. seq.). The purpose of bilingual education as specified by these various statutes is to ensure that children of limited-English proficiency are provided educational opportunities that are as effective as those provided to children whose primary language is English. Such purpose has been reinforced by case law. The Lau decision requires instruction in a child's primary language; and the Diana case, although settled out of court, requires non-discriminatory assessment in a child's primary language prior to special education placement.

Special Education

In the area of special education, P.L. 94-142 (20 USC § 1401 et. seq.) and Section 504 of the Rehabilitation Act of 1973 (29 USC § 794 et. seq.) have been the most important pieces of legislation that ensure the rights of handicapped children to a free and appropriate public education. Essentially a civil rights mandate, Section 504 demands practices that do not discriminate on the basis of handicap. Based on the Constitutional principles of equal protection and due process, P.L. 94-142 mandates the right to education for all handicapped children; non-disciminatory assessment, classification, and placement in special education programs; individualized and appropriate education; least restrictive placement; procedural due process; and parent participation and shared decisionmaking. Parallel to these federal statutes, California's legislature has also mandated education for all handicapped children (Cal. Educ. Code §56000 et. seq.). The purpose of special education as specified by these various statutes is to ensure that all handicapped children have available to them a free

appropriate public education that provides specially designed instruction and related services to meet their unique educational needs.

Bilingual Special Education

Although legal mandates focus on special education and bilingual education separately, in cases where a child meets requirements for both handicapped and bilingual education programs, legal demands should logically intersect. Such a view has been expressed frequently by proponents of bilingual special education (Baca, 1980b; Figueroa, 1980; Gallegos, Garner & Rodriguez, 1980). Although the law has not explicitly addressed eligibility of handicapped bilingual children, it seems reasonable that "as the law mandates a 'free and appropriate' public education for all handicapped children and requires the development of individualized education programs to meet the unique needs of each exceptional child, this must certainly include bilingual education considerations for handicapped children who are linguistically and culturally different" (Gallegos, Garner & Rodriguez, 1980, p. 4). But logic aside, bilingual special education remains to be defined by law, and it has been suggested that working out the relationship between these two areas will be the challenge of the 1980's (Baca, 1980a).

It is interesting that such right to educational opportunity is still being argued since many of the court decisions regarding special education service made prior to passage of P.L. 94-142 directly addressed educational practices with minority children (Larry P. v. Riles 1972, 1979; Diana v. State Board of Education, 1970,1973; Covarrubias v. San Diego Unified School District, 1972; Spangler v. Board of Education, 1970). These litigative decisions and subsequent legislation (P.L. 94-142) have resulted in a number of changes in the education of minority students. Most of these changes address identification and placement procedures for special programs. For example, all cases cited above found standardized testing procedures to be racially, culturally, and linguistically discriminatory when test

results were used as a basis for special education placement. Such inappropriate use of test results contributed to disproportionate representation of minorities in special education classes. The remedies ordered in the Diana case included (1) testing in the child's native language, (2) retesting using non-verbal intelligence tests; (3) development of test norms applicable to specific ethnic groups; (4) development of plans for revised testing programs; (5) explanation of disproportionate representation of minorities in special education classes; and (6) development of transition programs to help students return to regular education programs after decertification as mentally retarded. The first four of these mandates directly address the issue of testing and identification, the fifth addresses placement, and only the final mandate relates to educational programming (Keogh, 1975).

Prompted by such legal decisions, educators have been busy attempting to rectify the assessment, placement, and programming errors relative to minority handicapped children. Literature review reveals substantial skewing of effort toward assessment issues, with relatively little attention devoted to questions of appropriate programming once a minority child has been qualified for special education service. As Bailey and Harbin (1980) point out:

> While this goal (appropriate educational programs for each child) probably served as a major impetus for the movement toward nondiscriminatory evaluation, it has since taken a secondary role as professionals have focused on attempts to establish equality in testing. (p. 595)

To clarify this point requires review of work that has been done in non-discriminatory assessment and appropriate programming for minority handicapped children. Prior to addressing such issues, the magnitude of the problem needs to be discussed.

The Scope of the Problem: The Population

Definitions

It has been suggested that defining "the exceptional minority child" is a difficult task (Chinn, 1979). But by merging typical

descriptions of handicapping conditions with typical descriptions of minority groups, a picture of the target population begins to emerge.

The Education of All Handicapped Children Act of 1975 (20 USC § 1401 et. seq.) and the accompanying Education of the Handicapped Regulations (34 CFR §300.5) define handicapping conditions to include mental retardation, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, orthopedically impaired, other health impaired, deaf-blind, multihandicapped, and specific learning disabilities. Further, because of such conditions, the handicapped child requires special education and related services to derive benefit from educational programs.

The Council for Exceptional Children (1978) defines minority group as being:

> . . .any group which because of racial or ethnic origin constitutes a distinctive and recognizable minority in our society. Present examples of minority groups would include Blacks or Afro-Americans, Puerto Ricans, and Oriental Americans. (p. 87)

The federal government (DHEW, OCR, 1978) defines minority as membership in Black, Hispanic, American Indian/ Alaskan Native or Asian/Pacific Islander ethnic groups. Implied in such definitions, which are clearly based on racial or ethnic grounds, is minority status related to language. Within each group, and closely tied to ethnic origins, the possibility exists that members use a language other than English as their primary mode of communication. Thus, the definition of minority might be expanded to include people who are speakers of languages other than, or in addition to, English and whose racial or ethnic origins constitute a distinctive subgroup in society.

By combining these definitions, a minority handicapped child could be, for example, one who is mentally retarded and Mexican, learning disabled and Vietnamese, or hearing impaired and Navajo. Because our definition of minority includes the notion of language, direct

assessment and treatment of the handicapping conditions is confounded in these children and the implications for educating them appropriately are overwhelming.

Prevalence

While federal regulations require child counts under the definitions of minority and handicapping condition separately, no such requirements exist for counting children who are both handicapped and of minority status. Although P.L. 94-142 regulations require reporting of numbers of minority children who are mainstreamed out of special classes, national, state and local agency data regarding numbers of children in special education classes seem to have been collected incidentally. Such numbers are, therefore, neither easily retrieved nor conducive to forming a coherent picture of the scope of the problem. Such lack of specificity in meeting child count requirements creates an initial and pervasive gap in our knowledge regarding minority handicapped children. Essentially, it is unclear how many minority handicapped children exist in our schools today. Identifying the magnitude of the problem in terms of numbers of children needing or receiving service becomes, at this point, an exercise in crude estimates and suggests a critical need for an accurate data base.

Minority. Data from the 1978 Elementary and Secondary School Civil Rights Survey (USDHEW, OCR, 1978) indicate that at that time minorities accounted for 24.68% of the total national school enrollment which was estimated at 41,836,257. Reported by minority group, 15.72% were Black, 6.75% were Hispanic, 1.42% were Asian/Pacific Islander, and .79% were American Indian/Alaskan Native. In a later survey, the U.S. Department of Education, Office for Civil Rights (1980), indicated that 10,652,272 minority children represented 26.74% of the nation's total public elementary and secondary school population in 1980. The national breakdown shows 16.1% of these children were Black, 8% were Hispanic, 1.9% were Asian/Pacific Islander, and .8% were American Indian/Alaskan Native.

In California, the distribution is somewhat different and varies according to the information source as well as time of data collection. According to the U.S. Department of Education (1980), Black children represent 10.1%, Hispanics represent 25.3%, Asian/Pacific Islanders represent 6.6%, and American Indian/Alaskan Natives represent .8% of California's public elementary and secondary school population. According to the California Department of Education, Office of Special Education (1982), as of December 1981 there were 4,046,156 children enrolled in the California public schools. Of that group, 43.6% were minorities: 9.9% were Black, 25.8% were Hispanic, 7.1% were Asian/Pacific Islander (including 1.6% Filipino) and .8% were American Indian/Alaskan Native.

Information from the Los Angeles Unified School District (LAUSD, 1981b) represents an example of local data in California. In the fall of 1981, the district enrolled 536,142 children. Of that number, 1,992 (.4%) were American Indian/Alaskan Native, 118,143 (22%) were Black, 40,312 (7.5%) were Asian/Pacific Islander, and 254,966 (47.6%) were Hispanic.

Handicapped. Estimating numbers of handicapped children is more problematic than estimating numbers of minorities, and census of the handicapped is inexact. As explained by Healey, Ackerman, Chappell, Perrin, and Stormer (1981):

> Accurate documentation on the size of the population requiring service is unavailable. Estimates of the number of handicapped individuals vary widely depending on the definitions used, the data collection methods used and the location and the age range of the population investigated. A major complication arises from the fact that definitions of handicaps are not consistent among service agencies. (p. 2)

Further, prevalence estimates are typically reflections of people receiving, as opposed to needing services. Such a distinction becomes important when considering minority handicapped children because numbers available reflect children identified through current assessment procedures which tend to either under- or over-estimate the size of the population.

Such disclaimers notwithstanding, some estimates of the handicapped population do exist. Utilizing categories that were later defined in P.L. 94-142 (20 USC § 1401 et. seq.), the Rand Corporation (Kakalik, 1973) prepared an estimate for the U.S. Department of Health, Education and Welfare. Of the 83.8 million children in the United States under the age of 21 years in 1970, 9,649,000, or 11.51%, were reported as handicapped. The breakdown included 193,000 (2.0%) visually impaired; 440,000 (4.56%) hard of hearing; 50,000 (.52%) deaf; 2,200,000 (22.8%) speech impaired; 1,676,000 (17.37%) crippled or other health impaired; 2,800,000 (29.02%) mentally retarded; 1,500,000 (15.55%) emotionally disturbed; 740,000 (7.6%) learning disabled; and 50,000 (.52%) multihandicapped.

In California, the State Department of Education, Office of Special Education (CSDE, 1981), estimated 357,679 handicapped children in the state as of December 1981. Such an estimate reflects 8.84% of the state's total public school enrollment at that time. Of the handicapped children identified, 22,266 (7.9%) were mentally retarded; 2,938 (.8%) were hard of hearing; 3,318 (.9%) were deaf; 92,770 (25.9%) were speech impaired; 2,311 (.6%) were visually handicapped; 8,743 (2.4%) were emotionally disturbed; 7,595 (2.1%) were orthopedically impaired; 15,083 (4.2%) were other health impaired; 190,796 (53.3%) were learning disabled; 171 (.1%) were deaf-blind; and 5,688 (1.8%) were multihandicapped. Discrepancies in California data as compared to the Rand data could be a function of reliability of available estimates as well as differences in the time of data collection. Further, and particularly regarding the learning disabilities category, differences in reported prevalence could reflect greater societal concern for that condition in recent years.

Minority handicapped. While data available regarding minority enrollments and special education enrollments for various handicapping conditions suggest a problem of some magnitude in each area separately, the question still remains as to numbers of minority handicapped children in the nation's schools.

The 1978 Civil Rights Survey of Elementary and Secondary Schools (DHEW, OCR, 1978) reported nationwide special education placement for specific ethnic groups. Special education programs included were those for the educable mentally retarded (EMR), trainable mentally retarded (TMR), seriously emotionally disturbed (SED), specific learning disabled (SLD), and speech impaired (SI). Ethnic groups were American Indian/Alaskan Native, Asian/Pacific Islander, Hispanic, Black, and White. Reported percentages of placements were based on weighted projections to national totals from a survey of 6000 school districts across the country.

Regarding specific categories by ethnicity, 1.73% of American Indian/Alaskan Natives, .37% of Asian/Pacific Islanders, .98% of Hispanics, 3.46% of Blacks, and 1.07% of Whites were placed in EMR classes. Such percentages, when compared to an average of 1.43% of all students placed in EMR classes, suggests underrepresentation in this category of Asians, Hispanics and Whites and slight overrepresentation of American Indians. Blacks, however, are sharply overrepresented.

Regarding TMR placements, .23% of American Indians, .15% of Asians, .24% of Hispanics, .30% of Blacks, and .19% of Whites were assigned to such programs. As compared to an average of .23% of all students placed in TMR classes, these data suggest equal representation across ethnic groups.

A similar result was noted regarding the SED category where .32% of all students were placed in SED classes and .33% of American Indians, .10% of Asians, .29% of Hispanics, .50% of Blacks, and .29% of Whites were so placed.

Regarding specific learning disability placements, 3.49% of American Indians, 1.27% of Asians, 2.58% of Hispanics, 2.23% of Blacks, and 2.32% of Whites were placed in such classes as compared to an average of 2.31% of all students placed in SLD programs. These data suggest that Whites are placed in almost exact proportion to the national average, whereas Blacks and Asians are somewhat

underrepresented and Hispanics are somewhat overrepresented. American Indians, however, are sharply overrepresented as compared to national averages of SLD placements.

In terms of speech impairments, a category that includes language disorders, all groups except Whites are underrepresented as compared to a national average of 1.99% placement. In this category, 1.87% of American Indians, 1.85% of Asians, 1.78% of Hispanics, 1.87% of Blacks, and 2.04% of Whites were placed in programs for the speech impaired.

Overall, the data suggest that EMR, SLD, and SI categories are the most vulnerable to disproportionate placement across ethnic groups. Further, and with respect to specific ethnic groups, Asian/Pacific Islanders tend to be uniformly underrepresented in all categories of special education programs. By and large, Hispanics are represented in proportion to national averages, whereas some variability is noted in other ethnic groups.

At the state level, California has recently begun counting children according to ethnicity and handicapping condition. Data available from the State Department of Education, Office of Special Education (1981), reflect the ethnic categories of American Indian, Asian (including Filipino), Hispanic, Black, and White; and the handicapping conditions of speech impaired, specific learning disability, and mental retardation. Children in these ethnic groups represent .81% (American Indian), 7.07% (Asian, including Filipino), 25.83% (Hispanic), 9.87% (Black), and 56.42% (White) of the total state public school enrollments in grades K-12 as of December 1981. But children in these ethnic groups who exhibit the three specified handicapping conditions represent 7.17% (American Indian), 8.44% (Asian, including Filipino), 7.61% (Hispanic), 11.97% (Black), and 9.51% (White) of the enrollments for their ethnic groups in grades K-12. Further, the breakdown by ethnic group in grades K-12 by specific handicapping condition shows that 1.53% of American Indians, 3.4% of Asians (including Filipinos), 2.04% of Hispanics, 2.36% of Blacks, and 2.49% of Whites exhibit speech disorders; 4.52% of American

Indians, 2.73% of Asians (including Filipinos), 3.91% of Hispanics, 6.63% of Blacks, and 5.20% of Whites exhibit specific learning disabilities; and .50% of American Indians, .96% of Asians (including Filipinos), .69% of Hispanics, 1.24% of Blacks, and .65% of Whites exhibit mental retardation. Clearly some disproportion is evident at the state level as well.

Although California (CSDE, 1981) also reports ethnicity by instructional settings (including special day class, resource specialists service, designated instructional service, and non-public school service) as well as child count by handicap and instructional setting, the intersection of ethnicity, handicap, and instructional setting is not reported. It would be instructive to know, for example, what handicapping conditions are represented in the 25,685 Hispanic children who are assigned to special day classes in the state.

Data are not currently available at the state level in California regarding minorities with handicapping conditions other than speech impairment, specific learning disability, and mental retardation. But concern for establishing a data base in this regard is reflected in a state-funded study currently in progress. The study, entitled "Special Education Services for Limited- and Non-English Proficient Handicapped Students: State of the Art and Future Directions," is surveying practices in the education of LEP/NEP handicapped children in California with the expectation of making recommendations for improving delivery systems (Note 1).

Some data are also available at the local level. For example, the Los Angeles Unified School District (LAUSD, 1981a) reports numbers of children in special education programs receiving services specified in bilingual individualized education plans, but no breakdown of handicapping condition by ethnicity is readily available. For example, although the district reports that 403 limited- and non-English proficient trainable mentally retarded children received educational service specified in bilingual individualized education plans, it would be useful to know the breakdown by ethnicity.

While the numbers reported here can be confusing, several points seem clear. First, a coherent plan for collecting data regarding the numbers of children either needing and/or receiving bilingual special education services does not exist. Without definitive data to describe the scope of the problem, planning of appropriate educational programs designed to cope with the unique needs of minority handicapped children will remain subject to extreme variability and imprecision.

Further, not only is it disturbing that such disproportion persists in the face of mandates to the contrary, but it is also unclear what accounts for disproportionate representation, particularly with respect to EMR, SLD, and SI categories. Potential contributors to disproportion may be a function of assessment procedures used and, in particular, instruments and techniques that lack sophistication or technology to filter out language difference factors that might influence a child's performance and lead to a diagnosis of handicap when none exists. Certainly, the assessment and placement process requires investigation.

Assessment and Placement

Bilingual Education

The purpose of assessment in bilingual education is to evaluate a child's relative proficiency in English and in the primary language such that he or she may be classified and placed in an appropriate educational program. The Lau Remedies (OCR, 1975) specify that a student whose primary or home language is other than English must be identified and the child must be tested to determine English proficiency. On the basis of proficiency test results, a child may then be placed in an appropriate bilingual instructional setting.

The Remedies established three criteria against which home language is judged: If a language other than English was acquired by a child first; if the child speaks a language other than English most often; or if a language other than English is spoken most often in the

child's home, regardless of the language spoken by the child, then the child is judged to have a primary language other than English.

In California, and in response to the Lau Remedies, the Home Language Survey (Cal. Educ. Code § 52164) is used to survey parents and identify a student's primary language. The survey consists of a four-item questionnaire:

1. Which language did your son or daughter learn when he or she first began to talk?
2. What language does your son or daughter most frequently use at home?
3. What language do you use most frequently to speak to your son or daughter?
4. Name the languages in the order most often spoken by the adults at home.

At least one response other than English is taken as indicative of a non-English primary language and further assessment of the child's English language abilities must be conducted.

In general, English proficiency testing must include assessment of understanding, speaking, reading and writing, although there are a few exceptions to the rule in California. Children in grades K-2 may be evaluated in terms of oral (understanding and speaking) skills only and, on the basis of test scores, may be classified as either limited-English proficient (LEP) or fluent English proficient (FEP). Children in grades 3-12 who score in the fluent range on tests of oral skills may be classified as FEP only if they also score above district-established standards on tests of reading and writing. Further, proficiency tests must assess a child's ability not only in English but in the primary language as well.

Language assessment instruments. A number of assessment instruments have been used to determine language dominance or relative language proficiency. The majority of tests available are applicable to assessing Spanish-speaking children, and the most commonly used of

these instruments are the Bilingual Syntax Measure I (BSMI) (Burt, Dulay & Hernandez-Chavez, 1975), the Bilingual Syntax Measure II (BSMII) (Burt, Dulay & Hernandez-Chavez, 1978), the Language Assessment Scales I & II (LAS I & II) (DeAvila & Duncan, 1975), and The Basic Inventory of Natural Language (BINL) (Herbert, 1980). Each of these tests has English and Spanish versions, as well as a number of levels appropriate to different ages of children. Wald (1981) reported that the four tests are not comparable in that each test has a different set of language proficiency criteria and, therefore, produce different sets of language proficient children from the same population. Further, each instrument is restricted to testing a limited number of linguistic components. Merino and Spencer (1980) compared the English and Spanish versions of five commonly used language proficiency instruments including the BINL, BSM and LAS. They evaluated each instrument according to its linguistic and psychometric qualities and the results showed that the tests varied considerably not only among themselves but also within the English and Spanish versions of each instrument.

Since these tests are used widely to classify Spanish-speaking children for bilingual education placement, and since they apparently do not measure the same things, it is reasonable to question exactly what constitutes a limited-English proficient child as classified according to these commonly used assessment instruments. It is further important to point out that these tests measure oral language skills only and that most tests of Spanish-English bilingual proficiency do not include reading and writing components. In California such assessment procedures are determined at the district level and thus are subject to considerable variability. At best, identification of Hispanic children for bilingual programs seems to be an imprecise science.

When children come from non-English, non-Spanish language backgrounds, procedures used to determine both English and primary language proficiency are more primitive. Not only do few tests exist (Galang, 1982). but those available are limited in terms of the language they evaluate and in age ranges addressed. Further, existing

tests are not widely disseminated. Attempts to adapt existing Spanish-English proficiency tests to other languages, particularly non-IndoEuropean languages, raises validity issues related to translation between differing linguistic and orthographic systems. Addressing such adaptation of the BINL, BSM, and LAS tests to Asian languages, Kim (1980) suggested a questionable relationship between language proficiency as measured on those instruments and the various linguistic units of Asian languages, particularly Korean. When such criticism is viewed in light of the confusing aspects of the BINL, BSM, and LAS measures themselves, such translation/adaptation efforts seem minimally beneficial. However, as a strategy for developing instruments to assess language proficiency in non-English/non-Spanish children, "it is very important that each of the original test items be analyzed and evaluated in terms of the specific objective of the test item to determine the feasibility of the adaptation" (Kim, 1980, p. 12). Further, linguistic, psychometric and cultural factors should be incorporated in translations/adaptations.

In actual practice, given not only limited test instruments of questionable validity but limited personnel who are adequately fluent to conduct primary language proficiency assessments in non-Spanish languages, evaluation may involve more intensive use of parent interviews combined with use of interpreters to judge a child's communicative abilities in the home language. Comparison of such evaluation is then made with either formal or informal measures of the child's English proficiency (Note 2).

Clearly, in the area of assessing relative language proficiency for placement in bilingual education programs, valid and reliable instruments are needed for all non-English languages. Regarding assessment procedures used with non-Spanish language children, investigation needs to be done into the process of assessment carried out by interpreters and through other informal means. Such considerations are crucial not only for LEP non-handicapped children but for minority handicapped children as well.

Special Education

The purpose of assessment in special education is to evaluate the child's unique educational needs and place him/her in an appropriate educational program to meet the needs identified. The major issue in such assessment relates to non-discriminatory evaluation. As specified in P.L. 94-142 (20 USC § 1401 et. seq.) and in the California Education Code (§56320 et. seq.), materials and procedures used for assessment are not to be racially, culturally, or sexually discriminatory, are to be administered in the child's native language or other mode of communication, and are to be valid for the purpose for which they are used. Further, no single test score or procedure is to be used as the sole criterion for placement, and the child must be assessed in all areas related to a suspected problem. Finally, psychological and health assessments must be conducted by credentialed personnel who are trained and prepared to assess cultural and ethnic factors appropriate to the student being assessed. The intent of such regulations seems specifically tied to historical abuses in testing and placement of minorities (Diana v. State Board of Education, 1970 & 1973; Larry P. v. Riles, 1972 & 1979). Thus, separation of assessment issues in special education from those in bilingual special education is difficult to achieve.

As specified earlier in this review, the federal government recognizes a number of handicapping conditions (34 CFR §300.5), and the state of California describes eligibility criteria (Title 5 Cal. Adm. Code § 3030) for entry into special education programs along similar categorical lines. Of the possible handicapping conditions, the focus here will be on language impairments, mental retardation and learning disabilities, since these conditions are most vulnerable to potential misdiagnosis and inappropriate placement. Further the legal definitions of these handicaps (34 CFR §300.5; Title 5 Cal. Adm. Code § 3030) suggest some overlap in assessment techniques that might differentially diagnose the disorders. For example, levels of general intellectual functioning as well as different language development and ability profiles might distinguish one disability from the others.

Thus, the same test instruments would need to be administered to all children with suspected disorders in these categories, but qualitative differences in performance would contribute to differential diagnosis.

As a basic requirement, some type of intelligence test is necessary in order to determine general intellectual function and to differentiate mental retardation from language or learning disabilities, since retardation is characterized by below average general intellectual functioning whereas language impairments and learning disabilities may exist in the presence of normal intelligence. Further, language development instruments are necessary in order to differentiate specific linguistic acquisition and ability disorders in the areas of phonology, morphology, syntax, semantics, and pragmatics characteristic of language impairments from more general processing problems characteristic of learning disabilities. Tests used to distinguish learning disabilities involve considerable auditory and visual linguistic material and in many cases language and learning disabilities coexist in a single child.

Because of the overlap in the instruments used to test each disorder as well as the similarity of the characteristic features of each condition, the possibilities of misdiagnosis and subsequent misclassification and inappropriate placement are enormous. In fact, with respect to minorities, these categories have been the ones most vulnerable to such misdiagnosis. The various types of assessment instruments used for differential diagnosis of these disorders rely to a greater or lesser extent on language. Thus, assessment of a child's performance in any area must be done in such a way that language differences do not skew scores and suggest disorder when none exists. Since language and culture are closely related and in turn are tied to ethnicity, the mandate for non-biased assessment is a sensible one in identifying children requiring special education services.

Measuring intellingence. In the area of general intellectual functioning, it should be pointed out that bias in standardized intelligence tests has been recognized since Binet designed his first

test in the early 1900s (Jensen, 1980). Educators wrestled with the issue long before the passage of P.L. 94-142 and many strategies used to achieve equality in testing have been with us for a while. However, due to recent litigation, particularly with regard to testing and special education placement of minorities and legislative mandates for non-discriminatory assessment, educators have renewed efforts to design non-biased test instruments to not only classify children for special education placement but to identify the unique educational needs on which instructional programming must be based. Such efforts have included the design of reputed culture fair or culture free tests, adaptive behavior scales, criterion referenced tests, norm referenced tests designed for specific populations, development of local or special group norms on existing norm referenced tests, and translation and restandardization of existing tests for non-English language groups (Bailey & Harbin, 1980; Mowder, 1979; Cleary, Humphreys, Kendrick & Wesman, 1975).

Culture free tests. Tests classified as culture fair or culture free (Cattel, 1950; Ravens, 1962) attempt to minimize verbal and cultural components of standardized testing by divorcing the test from the language bind. This is typically approached by using geometric forms instead of verbal test items, and the design of such tests is based on a theoretical distinction between crystalized and fluid intelligence. Crystalized intelligence is thought to be tapped by conventional standardized intelligence tests whereas fluid intelligence is thought to be unconnected to culture. Research regarding minority performance on culture fair tests (Higgins & Sivers, 1958; Kidd, 1962; Marquart & Bailey, 1955) has shown that they do not equalize performance. Cross-cultural research (Cole & Bruner, 1971; Cohen, 1969; Cole & Scribner, 1974) raises questions regarding the validity of one instrument that would be equally applicable to all cultural groups.

Adaptive behavior scales. Adaptive behavior scales (Doll, 1965; Mercer & Lewis, 1978; Nihira, Foster, Shellhaas & Leland, 1974) are designed to assess an individual's ability to cope with the social and natural demands of his/her environment. Although such scales have

become a popular way to evaluate youngsters and thus decrease overrepresentation of minorities in classes for the retarded, adaptive behavior scales have been criticized in a number of ways. Bailey and Harbin (1980) discuss three major issues including construct validity of adaptive behavior, instrumentation of the scales that may lead to inaccurate data, and classification of children such that the scale results in underrepresentation of minorities in special classes. Although adaptive behavior scales certainly provide a more complete picture of a child's functioning, it is unclear whether they identify special educational needs of children who function adequately in the community but consistently fail in school.

Criterion referenced tests. Criterion referenced tests attempt to compare a child's performance to a standard of mastery for any given skill. Such measures stand in contrast to norm referenced tests which compare a child's performance with other children. Criterion referenced measures have received some support in educational circles because they potentially identify critical basic skills, assess children to determine which skills are present, and design instructional programs to facilitate the absent skills. Such an approach is linked directly to appropriate educational planning and circumvents categorical labeling which is generally the result when norm referenced tests are used for identification and placement. While criterion referenced tests can be useful, Bailey and Harbin (1980) point out that school funding systems dictate categorical labeling and "many of the discriminatory aspects of norm referenced measures, such as wording or content, can be found in criterion referenced measures as well" (p.593). Further, sociolinguistic and sociocultural aspects of testing (Labov, 1976; Wolfram, 1976) which contribute bias to the test situation itself can come into play equally on criterion and norm referenced tests.

Restandardized tests. Development of local and special group norms refers to the restandardization of norm referenced tests in specific geographic regions and/or on specific subgroups of the population at large. Thus, restandardization of the WISC-R (Wechsler,

1974) on Spanish-speaking children in California and in Mexico or standardization of the Nebraska Test of Learning Aptitude (Hiskey, 1955) on hearing and deaf children would be examples of efforts at developing special group and local norms. Such an attempt at solving the problem of biased assessment is appealing, as well as directly responsive to court mandates such as the Diana order, since it permits comparison of children to others who have had similar experiences and opportunities. However, such a strategy has not been uniformly accepted. Norms developed in one geographic region or on one subgroup are likely not applicable to other regions/groups due to subtle differences in vocabulary and subcultural factors. Such practices may create provincialism and possibly further isolate children who are already restricted due to handicap or minority status or both (Bailey & Harbin, 1980). Potential isolation from the mainstream is a prospect that directly violates the spirit of current special education legislation. Further, standardization of tests on every minority group and/or every geographic region in the country offers a somewhat cumbersome solution to the test bias problem in addition to the questionable validity of broad application of such norms (Mowder, 1979).

Translated tests. Translation of English language tests into non-English languages has been a widely criticized strategy for achieving equality in testing. Such criticism rests on the notion that direct translation of a test that was designed as a function of the culture and language of one group into another language would still reflect the linguistic and cultural features of the original test but would essentially be dressed in new clothing. Without appropriate adjustment of test items to relate to linguistic principles and cultural factors of the applicable language group, a translated test does not provide nondiscriminatory assessment. Further, unless such translated instruments are re-standardized on the target population, bias in testing will be perpetuated whenever the test is used (Mowder, 1979).

With regard to use of translated tests with some Hispanic children, such criticisms may no longer be an issue. Several tests have been (Palacio-Muñoz, 1982; Palacio-Muñoz, Padilla & Roll, 1982), or are in the process of being (Dunn, 1965; Woodcock & Johnson, 1977) translated, adjusted, and renormed on a number of Spanish-speaking groups. Further, correlations between subgroups have been obtained to determine reliability and validity of the various versions of these instruments. The SOMPA (Mercer & Lewis, 1978), for example, a popular alternative to standardized intelligence tests, was originally normed on Mexican American, Black, and White children in California and has recently been translated into Spanish and renormed on approximately 1100 children in Mexico City. Correlations between the adaptive behavior scale item scores of American and Mexican children are approximately .96 (Note 3). Additional standardization on Mexican children in Baja California is in progress. However, for non-Spanish LEP groups, the state of the art in test translation and restandardization is less advanced and it is likely that assessment strategies in this regard used at an earlier point in time with Hispanics are still used with other language groups (Rosenbluth, 1976).

Educators concerned with the issue of nonbiased assessment of intellectual functioning in minority handicapped children have not only addressed these strategies for achieving equality in testing but have also suggested that it is the responsibility of the educational system to review and revise its practices to meet the needs of minority handicapped children (Cleary, Humphreys, Kendrick & Wesman, 1975). They further raise a crucial question: What are test results used for? The answer, ideally, is placement and educational program planning to meet the needs of the child. But whether such is the case is unclear at this time.

Bilingual Special Education

Although not explicitly stated in legislation or district policy, the purpose of evaluation in bilingual special education seems to be to assess the educational needs of handicapped children in a way that

distinguishes between language differences and language disorders and how each contributes to learning problems. It seems that the objective of such assessment with minority handicapped children would be to filter out linguistic and cultural differences as contributors to special educational needs. By equalizing such factors, it should be possible to evaluate children's abilities so that appropriate educational plans might be designed to address their disorders rather than their differences.

Assessing handicapped minority children. Major efforts have addressed the issue of intelligence testing. The alternatives applicable to special education in general apply specifically to special education of minorities since it was for the benefit of minority groups that nondiscriminatory assessment mandates were made. Attempts to design and/or standardize intelligence tests on non-English speaking populations have been discussed previously. While the intelligence testing issue is far from settled, other types of assessment procedures specifically designed to evaluate handicapping conditions in limited- and non-English proficient children have received considerable attention as well. A crucial issue in evaluating minority handicapped children for special education placement is determining that learning problems are not due to problems in English language learning unrelated to the LEP status of the child. Thus, test results must demonstrate similar performance in both English and the primary language. Obviously, such demonstration requires assessment in the native language in addition to English. For reasons discussed regarding special education in general, this type of bilingual assessment is difficult even for conditions where language performance is not central to the handicap, such as orthopedic impairment. But with handicap categories that are integrally tied to language behavior, such as learning disability, mental retardation, and language impairment, the difficulty of adequate assessment increases dramatically.

In addition to controlling for language differences in the assessment of handicapped minority children, accounting for how testing

measures and techniques interact with cultural differences across ethnic groups and how they influence a child's performance in assessment is required. This is a pervasive issue regarding any assessment of minorities but particularly with respect to evaluation of school achievement problems, for it demands that test results reflect functional ability and not be an artifact of cultural differences relative to the test situation. Such cultural account relates not only to linguistic differences across cultural/language groups, but to culturally-based behavioral differences and cognitive styles as well. Such variables must certainly be accounted for in assessing culturally diverse children (Galang, 1982; Labov, 1976; Wolfram, 1976), and it seems clear that examiners knowledgeable in and capable of accounting for cultural differences was the intent behind some of the non-discriminatory evaluation regulations. Whether culturally sensitive staff are available and how such sensitivity fits into the assessment process with minority handicapped children is unclear.

Another major problem with regard to assessment for bilingual special education relates to availability and adequacy of assessment instruments in non-English languages in conjunction with comparable instruments in English. A number of instruments used for evaluation of language disorders and learning disabilities in the general population have been used for testing LEP children as well, but many have been criticized as discriminatory (Arnold & Reed, 1976; Byrne, 1977; Grill & Bartel, 1977; Kresheck & Nicolosi, 1973; Mecham, 1973) and others suffer problems in standardization (Boehm, 1971; Carrow, 1973, 1974) content validity (Boehm, 1971) and translation (Carrow, 1973). As with tests of general intellectual functioning, the majority of tests available are applicable to Hispanic children. Language and cognitive assessment of other non-English language groups, particularly Asians, has been severely neglected (Hsia, 1981). In the absence of valid and reliable test instruments, and particularly for non-Spanish groups, evaluation relies on informal assessment procedures, frequently using an interpreter. Quality of results of such procedures is unknown.

Another major problem relates to availability of trained personnel to administer and interpret tests in non-English languages. As a case in point, Dulay, Burt and McKeon (1980) surveyed 60 speech-language pathologists, professionals trained to work with language impaired children, and found only 37% of their sample to be fluent in Spanish. Similarly, Carpenter (1983) surveyed 329 speech-language pathologists and found only 15% reporting full fluency for understanding Spanish and 13.6% reporting full fluency for speaking Spanish. Percentages were lower for non-Spanish languages and there was minimal overlap between such languages known by therapists and those reported as occurring in the children they served. In the absence of an abundance of trained personnel to conduct assessment, many districts hire bilingual diagnosticians specifically to carry out evaluations in non-English languages or use interpreters for the diagnostic process (Carpenter, 1983). While such strategies comply with non-discriminatory assessment mandates, in both cases monolingual special education specialists carry out educational plans that are based on assessment results. Such practice raises questions regarding the continuity of relationship between assessment and instruction. In terms of evaluation conducted with interpreters, validity of results is unknown.

Given the level of our knowledge and capability in adequately assessing language-related school problems of minority handicapped children, both over- and under-representation of such children noted in special education programs is not entirely surprising. Further, precisely what the decision-making process is regarding assessment and placement of these children is unclear and needs to be investigated in a systematic way. Finally, the relationship between assessment and instructional program is also ambiguous but before strongly recommending research in that regard a review of literature related to instructional programming is required.

While the eligibility criteria for entry into bilingual education and special education are clearly specified in California, such criteria are not clear when a child possibly qualifies for both services. Thus, we do not know on what bases decisions are made to

place handicapped minority children in either special education or in bilingual education programs since bilingual special education does not exist as a specified placement option in California. Unknown, too, is whether these types of educational placement are viewed as alternatives to each other when locating programs and services for handicapped minority youngsters, whether the special education individualized education plan (IEP) mechanism is utilized to specify bilingual education as a related service for these children, or whether some other strategy is used to appropriately place children who qualify as both minority and handicapped. Clearly this process requires long-term study.

Instructional Programs and Exit Criteria

Bilingual Education

Objectives. As mentioned earlier in this review, and as specified in federal and state mandates, the purpose of bilingual education is to ensure that children of limited-English proficiency are provided educational opportunities that are as effective as those provided to children whose primary language is English. The intent is that children's academic achievement shall not be negatively affected by lack of knowledge of English. Thus, objectives of bilingual education address promotion of English language fluency and academic achievement in all content areas of instruction.

Program options. A number of program options are available in California for placing students in bilingual education to achieve the specified objectives. Each option has similar regulations governing classroom composition and programmatic requirements. In any program no more than 2/3 and no fewer than 1/3 of the students may be LEP and the remaining students may be either FEP or students whose primary language is English. Thus, a LEP child must be placed in one of the bilingual education programs, whereas a child classified as FEP may be placed in any appropriate program, including, but not limited to, one of the bilingual education options. The rationale for including FEP and/or

monolingual Enlish students is related to providing for LEP students both language models and the opportunity for them to use English.

The programmatic requirements common to all bilingual education program options include daily English language development, daily primary language instruction in basic subject areas, structured activities to promote positive self-image and cross-cultural understanding, and instruction for FEP students in the primary language of the LEP students in the class. The program options for grades K-6 include basic bilingual education, bilingual/bicultural education, innovative bilingual programs, planned variation programs, and elementary level individual learning programs. Program options for grades 7-12 include secondary level language development programs, and secondary level individual learning programs.

The following descriptions of the purposes of each of these options are stated in the Guidelines for Implementation of State Bilingual Programs (CSDE, 1982):

> **Basic Bilingual Education for grades K-6:** "The principal goal of this option is to increase the English language proficiency and academic achievement of the LEP students" (p. 7).
>
> **Bilingual/Bicultural Education for grades K-6.** "The purpose of this option is to increase the overall academic achievement and English language proficiency of LEP students and to develop the LEP pupils' primary language skills" (p. 10).
>
> **Innovative Bilingual Programs for grades K-6:** "The purpose of the Innovative Bilingual Program option is to promote innovations in program options (a) (Basic Bilingual Education), and (b) (Bilingual/Bicultural Education) that focus on new management approaches, greater emphasis on team teaching or other appropriate improvements which expand the learning opportunities of pupils of limited-English proficiency" (p. 13).
>
> **Planned Variation Programs for grades K-6:** "The purpose of the Planned Variation Program option is to improve and compare language development programs for pupils of limited English proficiency. The program is primarily designed to provide instruction for LEP pupils whose English skills are superior to their skills in the primary language" (p. 16).

Elementary Level Individual Learning Programs for grades K-6: "The Elementary Level Individual Learning Program represents the minimum program requirements for elementary LEP pupils not enrolled in a Basic Bilingual (a), Bilingual-Bicultural (b), or Experimental (Innovative) Bilingual Program (c). It is an individual version of an (a), (b), or (c) program option designed to provide equal educational opportunities for elementary LEP pupils by promoting English language development, and by sustaining normal academic achievement through the use of the pupil's primary language for subject matter instruction" (p. 23).

Secondary Level Language Development Programs for grades 7-12: "The Secondary Level Language Development Program provides secondary LEP pupils with a structured bilingual program in order to promote English language proficiency and academic achievement through the use of the students' primary language for instruction in the nonelective content courses required for graduation. This is an optional program" (p. 19).

Secondary Level Individual Learning Programs for grades 7-12: "The Secondary Level Individual Learning Program represents the minimum program requirements for secondary LEP students and must be provided for all secondary LEP students not enrolled in a Secondary Level Language Learning Program. It is a systematic individualized program of instruction designed to provide equal educational opportunities for secondary LEP students by providing English language development and by sustaining normal academic achievement through the use of the student's primary language for subject matter instruction" (p. 21).

Student participation and parental involvement. Participation in any bilingual education program in California is voluntary. Although placement and reclassification procedures for LEP students require parent notification, and although guidelines encourage parent participation, parent approval is not mandatory to place a child initially or to change a placement. However, parents of LEP children may refuse to have their child participate in bilingual education or may withdraw their child from a bilingual education program at any time. Parents of an English proficient child must give approval for such a child to participate in bilingual education.

When a child is placed in bilingual education, the parents must be notified of the nature and objectives of the program and of the options available. If the parents so choose, the child may be educated under the bilingual individual learning program rather than in the self-contained bilingual options. In either case, the description of

the program provided to the parents is roughly analogous to the individualized educational plan (IEP) in special education. Unlike special education regulations, no procedural due process guidelines are specified in the event of disagreement between the district and the parents regarding bilingual education placement. Indeed, since parents have the right to refuse such placement, hearings would be an irrelevant procedure.

Measuring program effectivess. The most direct measures of success in bilingual education are achievement of English language fluency and academic achievement comparable to levels achieved by monolingual English-speaking students of the same age and grade. While research evaluating the effectiveness of bilingual education programs has been relatively scant, studies conducted have generally found such programs to be beneficial in promoting English and academic achievement in LEP students while not interferring with achievement of FEP students (Troike, 1978). Further, beneficial progams use both English and non-English languages for instruction, as opposed to immersion programs that emphasize one language or the other (Chan & So, 1982). Regarding teacher behaviors that lead to student success in bilingual education, effective use of two languages in instruction, sensitivity to cultural differences, and integration of notions of language development in all areas of instruction not designated ESL have been identified as significant factors in bilingual instruction (Guthrie, 1983). These factors represent teacher behaviors beyond the use of traditional "good teaching" techniques such as setting clear goals, presenting organized lessons, and pacing lessons appropriately for the needs of the class. Such a notion of required teacher skills for successful bilingual instruction will become even more important when considering bilingual special education, for specification of such skills suggests a number of abilities that special educators may not possess.

Exit criteria. Once a student has achieved the objectives of bilingual education, the student must be returned to a regular education program. In California, each district must specify reclassification criteria to determine when LEP students have developed

the necessary English skills to succeed in English-only instructional settings. Title 5 of the California Administrative Code (§4300 et. seq.) and the accompanying guidelines in the Education Code (§52164) specify procedures and criteria options for reclassifying students. Multiple criteria specified by districts must include teacher evaluation of English language proficiency and mastery of English curriculum; objective assessment of oral English proficiency, writing skills, reading, language arts, and mathematics; and parental consultation and opinion. Districts must base reclassification standards on empirically established ranges of performance in basic skills of non-minority students of the same age and grade.

Once a LEP student has been reclassified as FEP, the parents may choose to have the student remain in a bilingual classroom. But the intent behind such educational programs is to have the student meet districtspecified exit criteria rapidly and be mainstreamed into a regular education program.

Special Education.

Purpose. The purpose of special education programs is to provide specially designed instruction and related services to meet the unique educational needs of handicapped children such that they might achieve to a level commensurate with their abilities. Such instruction must not only be appropriate to each child's needs but must be provided in the least restrictive environment in order that handicapped children have opportunity to interact and be educated with non-handicapped peers. The intent seems to be to design and implement individual programs rather than to fit children into existing instructional structures.

The individualized learning plan. To achieve such purpose and comply with such intent, both federal and state levels require that an individualized education plan or program (IEP) be designed for every handicapped child who receives services from public agencies. At the

federal level, the Code of Federal Regulations (34 CFR §300.340-349) defines the IEP requirements, and similar regulations are defined at the state level in the California Education Code (§56340-56347).

IEP meetings must be conducted to develop, review and revise individual education programs. A representative of the local education agency, the child's teacher, and one or both parents must be included in the IEP meeting. When appropriate, others may be invited, including the child and evaluation personnel.

Regarding content of the IEP, California requires the same basic information as is mandated in the federal regulations: Levels of the child's current educational performance; annual goals, including short-term instructional objectives; specific special education instruction and related services that the child requires; a statement of the extent to which the child will be able to participate in regular education programs; the projected date of initiation and anticipated duration of special programs and services; and objective criteria, evaluation procedures and schedules of determining whether short-term instructional objectives are being achieved must be included in the IEP.

California further specifies that, when appropriate, additional information may be written into an IEP. Such additional IEP content includes prevocational career education for children in grades K-6; vocational education, career education and/or work experience education for students in grades 7-12; alternative ways for students in grades 7-12 to meet graduation proficiency standards; differential proficiency standards, if necessary; linguistically appropriate goals, objectives, programs, and services for children whose primary language is other than English; specialized services, materials, and equipment for students with low incidence disabilities; extended school year services when needed; and provision for transition into regular class programs if a child is to be transferred for any part of the school day. Such specificity of content can benefit not only handicapped children but minority children who are eligible for special education services as well. In particular, the inclusion of related services and

linguistically appropriate goals, objectives, programs, and services for non-English language children opens a direct avenue for providing bilingual special education services.

Parental involvement. Not only are such procedures and content mandated, but parent participation in the decision-making process and approval of the program placement and design are required. However, it has been suggested that parents frequently do not actively participate in the decision-making process (Goldstein, Strickland, Turnbull & Currey, 1980) and some efforts have been made to increase such participation (Goldstein & Turnbull, 1982). The significance of limited parent participation increases dramatically when the interaction in decision-making is between school professionals and parents from minority cultural and linguistic backgrounds.

Parents also have a number of due process rights regarding the education of their handicapped child, including right to notification of meetings, assessments, and placements as well as the right to appeal if they disagree with a school's decision regarding the education of their child. Such appeal procedures can move through administrative remedies of informal meetings, mediation conferences, and full state hearings to litigative appeal in the civil court system. Such due process provisions were included to benefit all handicapped children, but in particular minorities who suffered extreme inequalities in education prior to recent legislation.

Program options. Although educational programs for the handicapped are intended to be individualized, some programmatic options have been specified. To achieve the purpose and intent of special education, services are conceived as a continuum of program options (34 CFR §300.551; Cal. Educ. Code §56361) from least to most restrictive and including resource specialist programs; designated instruction and services such as speech, language, or hearing remedial services; special day classes and centers; non-public nonsectarian schools; and state special schools. Under the spirit of least

restrictive environment, services from a resource specialist to support a child who spends most of the school day in a regular education setting would be more desirable than a special day class which might tend to create greater isolation of handicapped children from non-handicapped peers.

The issue of appropriateness to the child's educational needs must also be considered. This involves benefit of special education intervention in general as well as relative benefits of the various types of services on the continuum of program options. Many special education effectiveness studies have examined programs for educable mentally retarded and learning disabled children because these conditions are thought to exist at the border of handicapped and non-handicapped categories. Thus, determining the efficacy of special education placement for such children as compared to regular education placement can be instructive for decisionmaking regarding how children can be best educated and how districts can best allocate resources.

Measuring program effectiveness. A number of early studies (Ainsworth, 1959; Bennett, 1932; Blatt, 1958; Mullen & Itkin, 1961) compared achievement of students placed in self-contained classes for the retarded with achievement of students with similar IQ's who were placed in regular classes. These studies suggested that regular class students achieved at levels equal to or better than children in special classes. While such results might be disheartening to special educators, it should be pointed out that these studies suffered a number of substantive and methodological flaws including less effective teaching and watered-down curricula in the special classes and subject selection bias in the research designs (Leinhardt & Pallay, 1982).

More recent studies (Haring & Krug, 1975; Myers, 1976; Sabatino, 1971) have been more carefully designed and compared specially developed special education demonstration programs with regular class placements. Results of these studies suggest that children in self-contained classes for the educable mentally retarded and specific

learning disabled, as well as those children receiving services from the resource specialist, achieve more academically than do regular class controls.

In reviewing research regarding achievement in various restrictive educational settings, Leinhardt and Pallay (1982) found some evidence in favor of less restrictive environment in terms of student achievement: "Resource rooms were better than regular placement with no support, but they seem to hold their own against self-contained placement as well. . .there is a modest ranking from restrictive to least restrictive situations" (p. 567). They concluded that it is not the setting itself that primarily affects a child's performance, rather, it is what goes on in the setting that can contribute to student growth. Traditional features of good instruction for the handicapped (and possibly for all children) such as small class size, efficient use of teacher and student time, mastery learning systems, formal management systems that encourage time on task, and positive teacher affect can be introduced into any instructional setting and thereby promote educational benefit for these kinds of handicapped children.

Exit criteria. While it seems that special education intervention can be beneficial to students who might have difficulty learning in a regular classroom, the issue of exit criteria remains a crucial point in special education. Mandates demand moving children through the continuum of service options to increasingly less restrictive environments, but a number of factors must be considered when determining whether a special education child's unique educational problems have been ameliorated to the point that mainstreaming becomes a feasible option (Jones, Gottlieb, Guskin & Yoshida, 1978). Such factors include child performance criteria in terms of achievement (Budoff & Gottlieb, 1976) and social skills (Gresham, 1983), regular education teacher ability to handle handicapped children in terms of teaching competencies (Redden & Blackhurst, 1978), attitudes (Larrivee & Cook, 1979), and social acceptance of the child by peers in the non-handicapped classroom (Esposito & Peach, 1983; Goodman, Gottlieb &

Harrison, 1972; Simpson, 1980). To date, no definitive and universal guidelines have been adopted and the emphasis, in the spirit of P.L. 94-142, seems to be on individually-based decisions.

Given the somewhat contradictory situation created by clear mandates for placement in less--rather than more--estrictive environments, and the subsequent push for mainstreaming on the one hand and vague criteria for determining exit eligibility on the other, it is conceivable that a child could remain in some type of special education placement for a long time. Such a possibility becomes more real if the child's learning problems are compounded by cultural and linguistic differences that make it difficult to assess the learning problems and to plan appropriate instructional programs.

Bilingual Special Education

Legal bases. Bilingual special education service is not specified in law as an instructional area distinct from bilingual education or from special education. While not specifically laid out under the title "bilingual special education," the legal bases for such service emerge from the application of special education regulations with regard to IEP contents. The purposes of such service are derived by combining the purposes of its component parts.

The special education IEP mandate provides the legal bases for bilingual special education service. If a child is handicapped and limited- or non-English proficient, then the IEP mechanism can be used to specify bilingual educational programming as a required related service. Further, in California, the regulations requiring specification of linguistically appropriate programming for LEP children offers an additional legal base for providing bilingual special education service as part of the child's program plan.

Purpose. Given such apparent legal foundations, bilingual special education should theoritically have two purposes which, in turn, should relate directly to the purposes of its component parts. One purpose

should be to ensure that handicapped children of limited-English proficiency are provided educational opportunities that are as effective as those provided to handicapped children whose primary language is English. The other purpose should be to provide specially designed instruction and related services to meet the unique educational needs of the minority handicapped child such that he/she might achieve to a level commensurate with his/her abilities.

Combining the objectives of bilingual education and special education yields the theoretical objectives of bilingual special education. One such objective should be to maximize English language proficiency and academic achievement in all content areas. The other should be to design and implement instruction that is individualized in terms of the handicappping condition and unrelated to LEP status.

Programs. While the mechanism for providing bilingual special education service seems fairly clear, albeit indirect, under both federal and state law, whether or not the theoretical purposes and objectives should or do occur in reality is unclear. Proponents of bilingual special education urge not only that instruction be adapted to accommodate the unique needs related to the handicapping condition, but that it also be conducted in the primary language and in English (Abbott & Peterson, 1975; Almanza & Mosley, 1980). Such a position is supported primarily by the apparent success of bilingual education approaches used with non-handicapped children because the best combination of languages for teaching limited-English proficient handicapped children has not been studied systematically. Further, while a number of bilingual special education demonstration projects have reported success in teaching such children using bilingual approaches (Landurand, 1980; Lerman & Cortez, 1978; Muller, 1975; Oxman, 1975; Sanua, 1975; Sirota, 1976; Weiss, 1980), common practice in the public school system in California is to conduct instruction for minority handicapped children in English (Carpenter, 1983).

Measuring program effectiveness. While the expected educational outcomes of programs reported in the literature seems related to English and/or home language acquisition as well as to academic achievement, what expected outcomes are in the public schools at large is unclear. Equally unclear is how outcomes should be measured. Is it appropriate to measure English language proficiency and ability to achieve academically as in bilingual education, or is it appropriate to measure academic change as a function of meeting goals stated in the IEP as in special education? Further, should outcome be viewed as an either/or choice? Would it be most appropriate to measure some combination of goals, and if so, what should such a combination be?

The decision-making process that leads to instructional program planning is also unclear. Erickson and Walker (1983) suggest that such program planning, including the decision of language of instruction, should account for the child's age, handicap in terms of type and severity, physical mobility, vocational future, potential for independent living, and potential for communication skills as well as the family's attitudes and goals, the resources in the community, and social interactions available to the child. But whether consideration of such factors is made in actual program design is unknown. Further, the linkage between assessment results and instructional program content is unclear. Ideally, the assessment procedures should yield information to be used in program planning including data regarding the child's educationally-related skills, abilities and needs as well as information regarding the variables enumerated by Erickson and Walker (1983) as germane to instructional decisions. Whether such information is derived from assessment of LEP handicapped children and whether it is used to design individual education programs is unknown.

Bilingual special education personnel. Assuming an appropriate instructional program is designed to meet both the non-English language and handicap-related needs of the child, the lack of adequately trained professional staff to implement such programs confounds the problem. Relatively few bilingual special educators exist (Baca, 1980b; Carpenter, 1983; Dulay, Burt & McKeon, 1980; Figueroa, 1980), since

most bilingual educators lack knowledge and skills related to special education and most special education specialists lack knowledge and skills related to bilingual education. A number of teacher training programs are underway (Carrasquillo, 1977; Note 4) and others are in the planning stages (Note 5). But lack of available personnel may be equally related to the limited number of training programs (Erickson & Walker, 1983) as to the almost overwhelming number of competencies that a bilingual special educator should be able to demonstrate. Baca (1980b) suggested a list of required abilities in the areas of non-English language usage, linguistic background, assessment techniques, instructional methodology, cultural sensitivity and awareness, and interaction with parents. While such abilities were conceived as applying to bilingual special educators, the adequacy of staff preparation applies as well to teacher training in general. Preparation of professionals is required to equip classroom teachers for managing LEP handicapped children who are mainstreamed into regular education programs (Fuchigami, 1980).

Parental involvement. Another major issue open to question relates to parent involvement in a child's educational planning (Marion, 1979, 1980). The intent of required parent participation seems based on desire to prevent schools from intervening with special programming for children without parental knowledge and approval of proposed plans. Whether such participation is also intended to mean full and equal input in decisionmaking and program planning is unclear. Participation may rather relate to ensuring that parents understand the proposed programs and the reasons for such plans, and that parents know the rights and recourse they have should they disagree with district proposals. Since Anglo parents who are at-one with the linguistic and cultural orientation of the schools have difficulty participating in their children's educational programming (Goldstein, Strickland, Turnbull, & Curry, 1980), what are the unique features of such participation when parents are from culturally and linguistically diverse backgrounds? Some evidence (Luetke, 1976) suggests that the family and parental desires are not included in special education program planning for LEP handicapped children.

It seems reasonable, then, to question how the parents of LEP handicapped children participate in the educational process and if they participate to the extent permitted and encouraged by law. Regardless of whether a child enters the system through bilingual education or special education, what is the nature of parent participation in the educational planning process? Do parents know and avail themselves of their legal rights in ensuring the most appropriate education for their children? And what efforts do school districts make to involve parents in educational program decision-making?

Thus far the discussion of instructional programs has been based on the assumption that educational plans are individually designed to meet the unique needs of LEP handicapped children. But such an assumption may be inappropriate or inaccurate. It has been suggested (Tymitz, 1983) that, rather than having individualized bilingual special education plans designed and implemented, a child may be placed in either a bilingual education or a special education program, as if those two placements were viable alternatives to each other. How these educational decisions are made and implemented in the absence of an ideal situation is unknown.

Also unknown are the educational outcomes for these children as a function of the decision-making process. When should the LEP handicapped child be mainstreamed out of bilingual special education, if such a program is available? If the practice of placing a child in either bilingual education or special education is the case, then when does the child exit the program, on what bases is the decision made, and where does the child go? It may not be too farfetched to imagine an educational career wherein a child moves back and forth between bilingual and special education, with such "shuttle education" ending only when the child is too old to qualify for public school service.

Future Research Directions

From the legal bases of bilingual special education there emerge several major themes and concepts which are particularly relevant to

the special education of language minority handicapped students: Nondiscriminatory ability testing; assessment decisionmaking by a multidisciplinary team; development of IEPs for students; and parental participation in educational planning. In addition, legislation mandates improved professional training of those who serve or will serve the language minority handicapped; design of curricula which link assessment/diagnosis with instructional procedures and educational strategies; and promotion of a cooperative relationship among the research enterprise, teachers, school administrators and parents of the handicapped. It is crucial that research be viewed as a collaborative effort with social systems whose policies, standards, and criteria contribute to inappropriate placement and instructional decisions.

Issues such as these raise a series of fundamental research questions which need to be addressed. They are central to the entire process of special education and carry a special urgency for language minority handicapped children because of the vulnerability of this population and its potential for misdiagnosis or misplacement due to language, cultural, or socioeconomic factors. The range of issues highlighted outlines a beginning agenda for applied research in the field of special education for language minority handicapped students. They are core issues which define research objectives and priorities for the field and guide the research efforts needed to understand and develop the assessment, instruction, training, and policy innovations required to satisfy present and future demands for appropriate education for students, including handicapped minority students.

Non-discriminatory Evaluation

A key research question is, can the cognitive assessment of handicapped minority students be improved? Legislation calls for tests to be nondiscriminatory to different language groups and mandates that a test be given in a child's natural or home language. In proceeding toward the goal of non-biased assessment, researchers have recently proposed different analyses of the problem (Mowder, 1979, 1980; Cauce & Jacobson, 1980; Clarizio, 1982). Other investigators have taken a more

empirical approach and have evaluated minority children's performance on a variety of standardized measures including the WISC-R (Dean, 1978, 1980; Gutkin, 1979; Kaufman, 1979; Oplesch & Genshaft, 1981; Reschly, 1978; Ross-Reynolds & Reschly, 1983; Sandoval, 1979; Stewart, 1976), the McCarthy Scales of Children's Abilities (Valencia, 1983), the Wide Range Achievement Test (Mishra, 1981), the Boehm Test of Basic Concepts (Piersel, Plake, Reynolds & Harding, 1982), the Iowa Test of Basic Skills (Thompson, Alston & Say, 1978), and the ITPA (Perez, 1980; Stewart, 1976). In general, the data suggest that the critical performance factor is the child's level of language development in either English or the home language.

To one extent or another, methodological weaknesses such as lack of control for SES, degrees of bilinguality, translation of instruments with Anglo norms, and insufficient description of samples can be found in all these studies. These weaknesses serve to remind us of the complexities involved in this line of research, the many problems that remain to be solved, and the relatively few questions that have been answered. Surely, untangling the cultural, linguistic, and social class factors which impinge on the cognitive assessment of language minority children presents a special challenge to the field of special education in general, and psychometrics in particular.

The majority of research conducted to study assessment issues has addressed the needs of Hispanic children and all studies previously mentioned were done using Spanish language samples. The state-of-the art in the assessment of Hispanic handicapped children is relatively more advanced than that regarding other language minority groups. Although studies can be designed to look at reliability, validity, and comparability of various versions of standardized tests in English and Spanish, for non-Hispanic language minority handicapped children basic test design and fundamental research is yet required.

For Hispanic children, a promising direction for research is the use of dual approaches--cognitive measures and adaptive behavior measures--to assess Spanish language handicapped students (Mowder,

1980; Baca & Cervantes, 1978). A battery of standardized, norm referenced intellectual and adaptive behavior measures which are valid and reliable for Hispanic minority students may provide meaningful estimates of their level of educational functioning. Mercer's (Mercer & Lewis, 1973, 1978, 1979) System of Multicultural Pluralistic Assessment (SOMPA) and Kaufman and Kaufman's (1983a,b) Kaufman Assessment Battery for Children (KABC) are the most comprehensive assessment packages available. Most important is the fact that these assessment batteries have been standardized on both Mexican and American samples.

These newly standardized sets of instruments are available for use with English and Spanish speaking students in the United States. Using both the American and the Mexican versions of the SOMPA and KABC with appropriate students will provide a wealth of data which will improve considerably the reliability and validity of the assessment package. In addition, the assessment team could utilize Spanish and English versions of other cognitive measures, (e.g., McCarthy Scales of Children's Abilities and the Illinois Test of Psycholinguistic Abilities) to assess their concurrent validity. Furthermore, a study could be designed to take a closer look at issues revolving around the reliability and validity of the adaptive behavior scales (Bailey and Harbin, 1980).

These areas of needed cognitive and adaptive behavior research with language minority handicapped students, if explored and pursued systematically, can be expected to contribute significantly to the improvement of assessment techniques and instrumentation. We should bear in mind, however, that the current developmental literature indicates that cognitive - social - linguistic - communicative systems are inextricably related and that these relationships offer exciting avenues for conducting creative, innovative research.

Multidisciplinary Team Decision-Making

Closely related to the issue of standardized assessment is the decision-making process involving the multidisciplinary team.

Multidisciplinary team evaluation refers to evaluation conducted by a committee or group of specialists with training and certification in the area of the student's handicap (Sommers, 1982). This team is charged with obtaining evaluation data appropriate to decisionmaking regarding the student's educational program; identifying the special education services needed; and guiding the development of an IEP. In broad terms the IEP serves as the baseline for determining the student's progress toward meeting the educational goals.

A search of the literature revealed no studies of the process of decisionmaking regarding language minority handicapped students by a multidisciplinary team. This represents a major gap in our knowledge. For example, we know nothing about the role of clinical judgment in the evaluation process. It is difficult to imagine an assessment situation in which clinical judgment plays no role. Assessment techniques and the resulting data are simply tools used in a decision making process. For the multidisciplinary team charged with making a judgment about a student, the decisions to be made are related to various aspects of individual team members' experience, training, and sensitivity to the cultural/linguistic background of the student. The team decides not only <u>which</u> students get placed in special education programs but <u>when</u> those students are no longer in need of intervention.

The seriousness of this kind of decisionmaking dictates that it be based on the most objective criteria available. At this time, however, it seems that there are very few clearly established criteria for making placement and treatment decisions, and considerable clinical judgment is required. Therefore, an intensive in-depth study of the decision-making process may empirically derive "rules" which underlie clinical judgments or impressions. This would be an important first step toward balancing arbitrary clinical judgments with more objective criteria.

IEP Development

The issue of IEP development is also a critical area for research. A search of the literature revealed no studies dealing with IEP design with language minority handicapped students. To some extent this gap in our knowledge is understandable because without precise, reliable, and valid assessment, it becomes very difficult to develop an IEP useful to the teacher, child, or parent. P.L. 94-142 appears to have been designed with the misconception that effective diagnostic and intervention strategies were available. Unfortunately, there is little empirical evidence that specific intervention strategies/materials lead to desirable academic/social outcomes (Page, 1980). Quite simply, programs and techniques of proven effectiveness for the education of students with various handicapping conditions do not exist. Thus, IEP design has become more of an art than a science.

In theory it was envisioned that the development and implementation of an IEP would be accomplished with full parental participation. Unfortunately, no guidelines were provided which could assist parents and educators in developing an IEP. At best we can say that the IEP should serve an administrative function which would make special education programs more accountable, and an educational function which would provide a basis for developing an instructional plan suited to the child's special learning needs (Morgan, 1981).

Logically, we may ask: If that is not the way it is, then how do IEPs get developed? This question is ripe for research. We might also ask what students need to learn at the different grade levels. Perhaps an even more piercing question is which children, with which handicaps are most likely to benefit from mainstreaming?

Answers to these types of questions, however tentative they may be, will contribute to our knowledge about the relationship between diagnosis and effective treatment for various handicapping conditions. Additionally, we may gain some insight into the most effective and appropriate training for teachers and other personnel (i.e.,

paraprofessionals) who work with language minority handicapped students.

Parental Participation

One final issue which warrants discussion is the relation between the legal rights of the parents of handicapped minority children and their participation in the educational planning process. The legislation of P.L. 94-142 provided guarantees to parents and clarified their roles as equal partners in the educational process. Of particular importance are rights relating to due process enabling parents to appeal decisions about how their child was identified, evaluated or placed in a program for exceptional children. Parents must give written approval of the assessment as well as of the IEP which results from the assessment. Even if parents initially approve an IEP, they maintain the right to cancel their approval and terminate the service.

Among the more important questions we can ask about the parent approval process are the following: How well do minority parents comprehend the content of the IEP and their ascribed rights? What is their level of involvement in the development of the IEP? Furthermore, as a follow-up after the child has been in a special education program for an extended period of time, it would be interesting to ask if parents consider the IEP to have made a difference in their child's educational progress.

Conclusion

Although this review has shown that bilingual special education is a legally-based option for LEP handicapped children, it has also demonstrated a number of gaps in our knowledge relative to providing appropriate education to these youngsters.

First, it is clear that we know very little about the linkages in the educational process and what the factors are that go into decision-making at any given point. Assessment, placement, instructional programming, and program exit have been studied and appear in the literature as discrete units. Yet we know they should be related by an over-arching decision making strategy. If such a strategy exists regarding LEP handicapped children, what it might be is unknown, as is the outcome, educational or otherwise, for these students.

Second, we know there is a lack of adequately trained personnel to meet the needs of these children, and we also know that more professionals are currently being prepared. We do not know how they will fit into the existing educational system structure or if the system will have to modify itself to accommodate the service these new teachers will be able to provide. We also do not know what effect such professionals will have on the educational outcomes of LEP handicapped children.

Third, we do not know what kinds of educational programs will be the most beneficial for LEP handicapped children. We are not sure how to assess these children in ways that yield maximum information for program planning. We do not know if our technology is adequate, given appropriately trained staff to implement it. And, conversely, we do not know, given such staff, if our technology is sufficiently adequate to impact on their educational lives. We do not know if different languages of instruction lead to different educational outcomes, and we are not even sure what the expected outcomes are or should be. We do know that

linguistic, cultural and familial factors interact with educational processes, but we do not know precisely what adaptations must be made to accommodate these children.

In short, although we can begin to define issues for investigation, the unknowns far outnumber the knowns. We believe that an appropriate way to sort out the theoretical from the real is to begin by studying the bilingual special education process as it exists.

Reference Notes

1. San Diego State University, Department of Special Education, was awarded the California State Department of Education contract to conduct this study.

2. Personal communication, Sharon Merrill, October, 1982.

3. Personal communication, Jane Mercer, May 1983.

4. The National Clearinghouse for Bilingual Education, Bilingual Special Education Packet, lists approximately 23 bilingual special education teacher training programs currently operating at universities across the country.

5. In December 1982, California State University-Long Beach submitted a proposal for a Bilingual Special Education Interdisciplinary School of Education Project Grant. The proposed project will "provide both degree and credential programs for pre-service and in-service training of teachers for the larger community of limited English speaking Spanish and Vietnamese students who also exhibit varying degrees and types of learning handicaps" (p.i).

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